

## Declaration For U.S. Patent Application

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention **entitled**  
(Insert Title) ELECTRON BEAM APPARATUS AND METHOD OF MANUFACTURING SEMICONDUCTOR DEVICE  
USING THE APPARATUS

the specification of which is attached hereto unless the following is checked:



was filed on November 2, 2001 as United States Application Number or PCT International  
Application Number 09/985,322 and was amended on \_\_\_\_\_  
(if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 (a) - (d) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

(List prior foreign applications. See note A on back of this page)	378040/2000 (Number)	Japan (Country)	12/12/2000 (Day/Month/Year Filed)	Priority Claimed <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	388385/2000 (Number)	Japan (Country)	21/12/2000 (Day/Month/Year Filed)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	3666/2001 (Number)	Japan (Country)	11/1/2001 (Day/Month/Year Filed)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	5128/2001 (Number)	Japan (Country)	12/1/2001 (Day/Month/Year Filed)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

(See note B on back of this page)

☐ See attached list for additional prior foreign applications

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below.

_____ (Application Number)	_____ (Filing Date)
_____ (Application Number)	_____ (Filing Date)

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of the application:

(List Prior U.S. Applications)	_____ (Application Serial Number)	_____ (Filing Date)	_____ (Status) (patented, pending, abandoned)
	_____ (Application Serial Number)	_____ (Filing Date)	_____ (Status) (patented, pending, abandoned)

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

James E. Armstrong, III, Reg. No. 18,366; William F. Westerman, Reg. No. 29,988; Ken-Ichi Hattori, Reg. No. 32,861; Le-Nhung McLeland, Reg. No. 31,541; Ronald F. Naughton, Reg. No. 24,616; John R. Pegan, Reg. No. 18,069; William G. Kratz, Jr., Reg. No. 22,631; Albert Tockman, Reg. No. 19,722; Mel R. Quintos, Reg. No. 31,898; Donald W. Hanson, Reg. No. 27,133; Stephen G. Adrian, Reg. No. 32,878; William L. Brooks, Reg. No. 34,129; John F. Carney, Reg. No. 20,276; Edward F. Welsh, Reg. No. 22,455; Patrick D. Muir, Reg. No. 37,403; Gay A. Spahn, Reg. No. 34,978; and John

Please direct all communications to the following address:

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Telephone: (202) 659-2930 Fax: (202) 887-0357

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Title 18 of the United States Code, § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor (given name, family name) Mamoru NAKASUJI  
(See note C above) Inventor's Signature Mamoru Nakasuji Date February 1, 2002  
Residence Kanagawa, Japan Citizenship Japanese  
Post Office Address 2-15-11, Serigaya, Kounan-ku, Yokohama-shi, Kanagawa-ken, Japan

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Inventor's Signature Nobuharu NOJI Date February 1, 2002  
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Full name of fifth inventor (given name, family name) Kenji WATANABE  
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Full name of sixth inventor (given name, family name) Takao KATO  
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Full name of seventh inventor (given name, family name) Hiroshi SOBUKAWA  
Inventor's Signature Hiroshi Sobukawa Date February 1, 2002  
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Full name of eighth inventor (given name, family name) Tsutomu KARIMATA  
Inventor's Signature Tsutomu Karimata Date February 1, 2002  
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Full name of ninth inventor (given name, family name) Shoji YOSHIKAWA  
Inventor's Signature Shoji Yoshikawa Date February 1, 2002  
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Full name of tenth inventor (given name, family name) Toshifumi KIMBA  
Inventor's Signature Toshifumi Kimba Date February 1, 2002  
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Full name of eleventh inventor (given name, family name) Shin OOWADA  
Inventor's Signature Shin Oowada Date February 1, 2002  
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Full name of twelfth inventor (given name, family name) Mutsumi SAITO  
Inventor's Signature Mutsumi Saito Date February 1, 2002  
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Full name of thirteenth inventor (given name, family name) Muneki HAMASHIMA  
Inventor's Signature Muneki Hamashima Date February 1, 2002  
Residence Saitama, Japan Citizenship Japanese  
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Full name of fourteenth inventor (given name, family name) \_\_\_\_\_  
Inventor's Signature \_\_\_\_\_ Date \_\_\_\_\_  
Residence \_\_\_\_\_ Citizenship \_\_\_\_\_  
Post Office Address \_\_\_\_\_

Full name of fifteenth inventor (given name, family name) \_\_\_\_\_  
Inventor's Signature \_\_\_\_\_ Date \_\_\_\_\_  
Residence \_\_\_\_\_ Citizenship \_\_\_\_\_  
Post Office Address \_\_\_\_\_

17901/2001	Japan	26/1/2001	Priority Claimed <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	
21183/2001	Japan	30/1/2001	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	
23804/2001	Japan	31/1/2001	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	
26580/2001	Japan	2/2/2001	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	
31901/2001	Japan	8/2/2001	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	
31906/2001	Japan	8/2/2001	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	
33599/2001	Japan	9/2/2001	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	
44964/2001	Japan	21/2/2001	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	
52095/2001	Japan	27/2/2001	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	
73380/2001	Japan	15/3/2001	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	
131238/2001	Japan	27/4/2001	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	
158571/2001	Japan	28/5/2001	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	

## U.S. ASSIGNMENT

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter ASSIGNOR) by

(Insert ASSIGNEE's  
Name(s) Address(es))

EBARA CORPORATION of 11-1, Haneda Asahi-cho, Ohta-ku, Tokyo, Japan  
and NIKON CORPORATION of 2-3, Marunouchi 3-chome, Chiyoda-ku,  
Tokyo, Japan

(hereinafter ASSIGNEE), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled

(Title of Invention)

ELECTRON BEAM APPARATUS AND METHOD OF MANUFACTURING SEMICONDUCTOR  
DEVICE USING THE APPARATUS

(\*If the assignment is  
being filed after the filing  
of the application, this  
section must be  
completed)

for which application for Letters Patent of the United States was executed on even date herewith unless otherwise indicated below:

\*filed on November 2, 2001, Serial No. 09/985,322

(Armstrong, Westerman, Hattori, McLeland & Naughton is hereby authorized to insert the series code, serial number and/or filing date hereon, when known)

and all Letters Patent of the United States to be obtained therefor on said application or any continuation, divisional, substitute, reissue or reexamination thereof for the full term or terms for which the same may be granted.

The ASSIGNOR agrees to execute all papers necessary in connection with the application and any continuation, divisional, reissue or reexamination applications thereof and also to execute separate assignments in connection with such applications as the ASSIGNEE may deem necessary or expedient.

The ASSIGNOR agrees to execute all papers necessary in connection with any interference, litigation, or other legal proceeding which may be declared concerning this application or any continuation, divisional, reissue or reexamination thereof or Letters Patent or reissue patent issued thereon and to cooperate with the ASSIGNEE in every way possible in obtaining and producing evidence and proceeding with such interference, litigation, or other legal proceeding.

IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/her/their signature(s).

(Signatures)

<u>Mamoru Nakasuji</u> (SIGNATURE)	<u>Mamoru NAKASUJI</u> (TYPE NAME)	<u>February 1, 2002</u> (DATE)
<u>Nobuharu NOJI</u> (SIGNATURE)	<u>Nobuharu NOJI</u> (TYPE NAME)	<u>February 1, 2002</u> (DATE)
<u>Tohru Satake</u> (SIGNATURE)	<u>Tohru SATAKE</u> (TYPE NAME)	<u>February 1, 2002</u> (DATE)
<u>Masahiro Katokeyama</u> (SIGNATURE)	<u>Masahiro HATAKEYAMA</u> (TYPE NAME)	<u>February 1, 2002</u> (DATE)
<u>Kenji Watanabe</u> (SIGNATURE)	<u>Kenji WATANABE</u> (TYPE NAME)	<u>February 1, 2002</u> (DATE)
<u>Takao Kato</u> (SIGNATURE)	<u>Takao KATO</u> (TYPE NAME)	<u>February 1, 2002</u> (DATE)
<u>Hiroshi Sobukawa</u> (SIGNATURE)	<u>Hiroshi SOBUKAWA</u> (TYPE NAME)	<u>February 1, 2002</u> (DATE)

NO LEGALIZATION REQUIRED

(Signatures)

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(SIGNATURE)

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(TYPE NAME)

(DATE)